(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3: 03.07.2002 Bulletin 2002/27

(51) Int Cl.7: A61B 5/05

(11)

(43) Date of publication A2: 04.10.2001 Bulletin 2001/40

(21) Application number: 01107947.2

(22) Date of filing: 28.03.2001

(84) Designated Contracting States:

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU

MC NL PT SE TR

Designated Extension States:

AL LT LV MK RO SI

(30) Priority: 30.03.2000 JP 2000093830

30.03.2000 JP 2000093831 30.03.2000 JP 2000093832 27.04.2000 JP 2000128049

28.06.2000 JP 2000194245

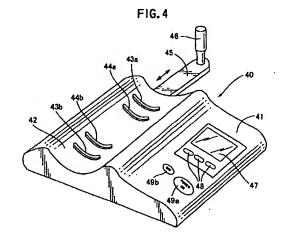
(71) Applicant: TANITA CORPORATION Tokyo 174 (JP)

(72) Inventors:

- Yamada, Yasushi Tokyo (JP)
- Fukuda, Yoshinori Tokyo (JP)
- Takehara, Katsumi Tokyo (JP)
- Ishigooka, Maki Tokyo (JP)
- Miyoshi, Tsutomu Tokyo (JP)
- (74) Representative: Müller-Boré & Partner Patentanwälte Grafinger Strasse 2 81671 München (DE)

(54) Bioelectrical impedance measuring apparatus

(57) Disclosed is a impedance measuring apparatus which is easy to use, and which is guaranteed to be free of incorrect measurement caused by some joints appearing in the current flowing passage intervening between two selected body parts and by the indefinite length between two selected body parts. The measuring apparatus of the present invention limits the place of the body under measurement to "one body region", i.e. a selected joint-to-joint body portion or joint-free body portion such as the forearm extending from the wrist to the elbow or the portion extending from the ankle to the knee, and comprises a housing having a contact surface to be applied to one selected body region; a first pair of measurement current supplying electrodes so placed on the contact surface that the one selected body region may be put in contact with the current electrodes; and a first pair of voltage measuring electrodes so placed on the contact surface between the pair of current electrodes that the one selected body region may be put in contact with the voltage electrodes.



EP 1 138 259 A3



EPO FORM 1503 03.82 (P04C01)

EUROPEAN SEARCH REPORT

Application Number EP 01 10 7947

Category		ndication, where appropriate,	Relevant	CLASSIFICATION OF THE
Category	of relevant pass	ages	to claim	APPLICATION (Int.CI.7)
Х	EP 0 926 488 A (YAM 30 June 1999 (1999-	MATO SCALE CO LTD) -06-30)	1,20	A61B5/05
A	* column 5, line 58 tables 1,2 *	8 - column 8, line 57;	12-15, 17,19,23	
X	PATENT ABSTRACTS OF vol. 1998, no. 11, 30 September 1998 (& JP 10 174679 A (30 June 1998 (1998-	(1998-09-30) MRON CORP),	1,20	
A	* abstract *		12-15, 17,19,23	
x	US 5 642 734 A (RUE 1 July 1997 (1997-6	7-01)	1,21	
Α	* column 15, line 1 table 11 *	4 - column 17, line 51;	22,23	
}	WO 99 09883 A (MICR 4 March 1999 (1999-	03-04)	1,21	
	* page 6, line 29 - 1 *	page 7, line 27; table		TECHNICAL FIELDS SEARCHED (Int.Cl.7)
	EP 1 080 686 A (TAN 7 March 2001 (2001- * column 4, line 42 tables 4-10 *	ITA SEISAKUSHO KK) 03-07) - column 10, line 25;	1,20-23	GO1N
Ì				
	The present search report has b	een drawn up for all claims	Ì	
	Ptace of search	Date of completion of the search		Examiner
BERLIN		15 May 2002		
CAT X : particu Y : particu	TEGORY OF CITED DOCUMENTS Ularly relevant if taken alone ularly relevant if combined with anoth	T: theory or principle E: earlier patent docu	underlying the im iment, but publish	vention
A : techno O : non-w	ient of the same category plogical background rritten disclosure rediate document	L : document cited for & : member of the sar document	other reasons	corresponding

2

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 01 10 7947

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

15-05-2002

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
EP 0926488	A	30-06-1999	JP AT CN DE EP EP US	11070091 A 4162 U1 1220858 A 29824043 U1 1193494 A1 0926488 A2 6188925 B1	16-03-1999 26-03-2001 30-06-1999 06-04-2000 03-04-2002 30-06-1999 13-02-2001
JP 10174679	Α	30-06-1998	US	6243651 B1	05-06-2001
US 5642734	A	01-07-1997	US AU CA CN EP JP WO US	5526808 A 5383796 A 2218281 A1 1244779 A 0955871 A1 2001500392 T 9632883 A1 6128518 A	18-06-1996 07-11-1996 24-10-1996 16-02-2000 17-11-1999 16-01-2001 24-10-1996 03-10-2000
WO 9909883	A	04-03-1999	US AU WO	6128518 A 9209798 A 9909883 A1	03-10-2000 16-03-1999 04-03-1999
EP 1080686	A	07-03-2001	JP CN EP	2001070273 A 1287823 A 1080686 A1	21-03-2001 21-03-2001 07-03-2001

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82